

California State Fire Training



Bus (916) 568-2911

osfm.fire.ca.gov/training/training

INTERIM SFT PROCEDURES

Procedure Title: | Emergency Vehicle Technician Implementation

Edition: January 2015 edition of the State Fire Training Procedures Manual

Effective Date: November 1, 2018

Section Change: | Modifications to sections within 7.8: MECHANIC

All new text appears in underline. All deleted text appears in strikeout.

7.8: MECHANIC

7.8.1: FIRE MECHANIC I

7.8.1.1: Overview

- A. Fire Mechanic I certification identifies the skills and knowledge necessary for the fire apparatus mechanic. This certification recognizes the level of expertise needed to properly maintain fire apparatus.
- B. <u>Candidates pursuing Fire Mechanic I certification under the requirements listed here must complete all requirements and submit all application materials and fees postmarked on or before December 31, 2019.</u>

7.8.2: FIRE MECHANIC II

7.8.2.1: Overview

- A. Fire Mechanic II certification identifies the advanced skills and knowledge necessary for the contemporary fire apparatus mechanic. This certification addresses the level of expertise needed to properly maintain the new and complex fire apparatus in service today.
- B. Candidates pursuing Fire Mechanic II certification under the requirements listed here must complete all requirements and submit all application materials and fees postmarked on or before December 31, 2019.

7.8.3: FIRE MECHANIC III / MASTER MECHANIC

7.8.3.1: Overview

A. Fire Mechanic III/Master Mechanic identifies the advanced skills and knowledge necessary for specialized emergency vehicle fleet repair and program management. This certification addresses the latest level of expertise needed to properly maintain the new and complex fire apparatus in service today.

B. Candidates pursuing Fire Mechanic III/Master Mechanic certification under the requirements listed here must complete all requirements and submit all application materials and fees postmarked on or before December 31, 2019.

7.8.4: EMERGENCY VEHICLE TECHNICIAN I

7.8.4.1: Overview

- A. <u>Emergency Vehicle Technician I certification identifies the knowledge and skills necessary for the proper inspection and maintenance of emergency apparatus.</u>
- B. <u>Emergency Vehicle Technician I certification replaces Fire Mechanic I, scheduled to retire on December 31, 2019.</u>
- C. Candidates pursuing Fire Mechanic I certification under that certification's requirements must complete all requirements and submit all application materials and fees postmarked on or before December 31, 2019.
- D. <u>As of April 1, 2018, candidates pursuing Emergency Vehicle Technician I certification should utilize the Emergency Vehicle Technician I curriculum.</u>

7.8.4.2: History

- A. Established
 - September 1, 1984
- B. Revised
 - January 1, 2001
 - o <u>National Institute for Auto Service Excellence (ASE) test on Preventative Maintenance Inspections (T8) added</u>
 - o ASE test on Drive Train (T3) deleted
 - o ASE test on Engine Performance (A8) deleted
 - o Experience requirement of heavy equipment mechanic changed to automotive or truck mechanic
 - o Recertification requirement added
 - Fire Mechanic I certificates expired within one year are eligible for recertification
 - January 1, 2003
 - o Experience acquired through private industry qualifies
 - January 1, 2010
 - <u>Curriculum developed with new Certification Training Standards conforming to NFPA</u> 1071: Standard for Emergency Vehicle Technician Professional Qualifications (2011 edition)
 - October 1, 2018
 - Curriculum updated using 2012 State Fire Training Curriculum Development Model and to align with NFPA 1071: Standard for Emergency Vehicle Technician Professional Qualifications (2016 edition)
 - o Fire Mechanic terminology changed to Emergency Vehicle Technician

- The following classes will be retired or moved to the Fire Service Training and Education Program (FSTEP):
 - Allison Transmission
 - Ambulance Service and Maintenance
 - Aerial Apparatus

7.8.4.3: Prerequisites

A. Not applicable

7.8.4.4: Education

- 1. CAL FIRE State Fire Training (SFT)
- 2. Emergency Vehicle Technician 1A: Emergency Vehicle Technician 101
- 3. <u>Emergency Vehicle Technician 1B: Chassis Systems and Components Accessories or CFMA: Preventative Maintenance</u>
- 4. Emergency Vehicle Technician 1C: Cab and Body Systems and Components
- 5. <u>Emergency Vehicle Technician 1D: Electrical Systems A Accessories or CFMA: Basic Electrical or CFMA: Opt-Out Test Certificate</u>
- 6. <u>Emergency Vehicle Technician 1E: Pumps and Accessories or Fire Mechanic I: Fire Pumps and Accessories</u>
- 7. Emergency Vehicle Technician 1F: Tanks and Accessories
- B. National Institute for Auto Service Excellence (ASE)
 - 1. Gasoline Engines (T1)
 - 2. <u>Diesel Engines (T2)</u>
 - 3. Drive Train (T3)
 - 4. Brakes (T4)
 - 5. Suspension and Steering (T5)
 - 6. Preventative Maintenance Inspections (T8)
- C. Code of Federal Regulations (CFR)
 - 1. CFR 396.25: Department of Transportation (DOT) Brake Inspector Qualification

7.8.4.5: Certification Exam

- A. Emergency Vehicle Technician I Certification Exam
 - 1. An independent third-party testing agency will administer certification exams.
- B. <u>The California Fire Mechanics Academy, Inc. (CFMA) will administer Emergency Vehicle Technician</u> Certification Commission (EVTCC) testing.

7.8.4.6: Certification Task Book

A. Emergency Vehicle Technician I Certification Task Book

7.8.4.7: Experience

A. Fire Service (one of the following three options required)

- 1. Have a minimum of two (2) years full-time, paid experience in a California fire department, public agency, or private industry as an automotive or truck mechanic, with one (1) year of which must be related to the maintenance of emergency response vehicles.
- 2. <u>Have a minimum of three (3) years full-time, paid experience in a California fire department, public agency, or private industry as a truck mechanic with no emergency response vehicles required.</u>
- 3. Have a minimum of four (4) years volunteer time or part-time, paid experience in a California fire department, public agency, or private industry as a truck mechanic with primary duties performing as a truck mechanic.

7.8.4.8: Position

A. Not applicable

7.8.4.9: Application

- A. See 7.2.4: Application Process With a Certification Task Book.
- B. <u>Supporting Documentation</u>
 - 1. Copies of course completion certificates from SFT for each educational requirement
 - 2. Copies of ASE test completion certificates
 - i. ASE certificates must be current at the time of application.
 - 3. Copy of current DOT Brake Inspector Qualification
 - 4. <u>A verification letter signed by the fire chief, or his or her authorized designee, describing the candidate's specific background as it relates to the experience requirement (See 4.1.1: Letters of Verification.)</u>
 - i. <u>If the candidate's experience was obtained through a public agency or private industry, the highest-ranking individual familiar with the candidate's experience should sign this letter.</u>

7.8.4.10: Maintenance

- A. <u>Emergency Vehicle Technician I certification is valid for five years from the date of issuance and expires</u> at the end of the fifth calendar year of valid certification
 - 1. Example: A certification issued in May 2015 would expire on December 31, 2020.

7.8.4.11: Recertification

- A. <u>Emergency Vehicle Technician I recertification is designed for an individual currently certified as a Fire</u> Mechanic I or whose certification has a maximum of five-year issue date.
- B. <u>The candidate shall successfully complete the following six tests from the National Institute for Auto</u> Service Excellence (ASE):
 - Gasoline Engines (T1)
 - Diesel Engines (T2)
 - Drive Train (T3)
 - Brakes (T4)
 - Suspension and Steering (T5)

- Preventative Maintenance Inspections (T8)
- C. The candidate shall have a current DOT Brake Qualification CFR 396.25
- D. The candidate shall successfully complete a minimum of 36 hours of CFMA-approved continuing education courses.
- E. See 7.2.4: Application Process With a Certification Task Book.
- F. Supporting documentation:
 - Copies of completion certificates for ASE tests
 - i. ASE certificates must be current at time of application.
 - A copy of a completion certificate for CMFA continuing education
 - A copy of current DOT Brake Inspector Qualification
 - A copy of an Office of the State Fire Marshal (OSFM) Emergency Vehicle Technician I certificate
- G. SFT shall review applications as they are received.
 - The review committee shall be made up of SFT personnel and authorized representatives of CFMA.
 - See **7.2.3.3**: State Fire Training Review.

7.8.5: EMERGENCY VEHICLE TECHNICIAN II

7.8.5.1: Overview

- A. <u>Emergency Vehicle Technician II certification identifies the advanced knowledge and skills necessary for the proper repair of emergency apparatus.</u>
- B. Emergency Vehicle Technician II certification replaces Fire Mechanic II, scheduled to retire on December 31, 2019.
- C. Candidates pursuing Fire Mechanic II certification under that certification's requirements must complete all requirements and submit all application materials and fees postmarked on or before December 31, 2019.
- D. <u>As of April 1, 2018, candidates pursuing Emergency Vehicle Technician II certification should utilize the Emergency Vehicle Technician II curriculum.</u>

7.8.5.2: History

- A. Established
 - September 1, 1984
- B. Revised
 - January 1, 2001
 - o National Institute for Auto Service Excellence (ASE) test on Preventative Maintenance Inspections (T8) added
 - o ASE test on Drive Train (T3) deleted
 - o ASE test on Engine Performance (A8) deleted

- o Experience requirement of heavy equipment mechanic changed to automotive or truck mechanic
- o Recertification requirement added
 - Fire Mechanic I certificates expired within one year are eligible for recertification
- January 1, 2003
 - o Experience acquired through private industry qualifies
- January 1, 2010
 - o <u>Curriculum updated to align with NFPA 1071: Standard for Emergency Vehicle</u> Technician Professional Qualifications (2011 edition)
- October 1, 2018
 - Curriculum updated using 2012 State Fire Training Curriculum Development Model and to align with NFPA 1071: Standard for Emergency Vehicle Technician Professional Qualifications (2016 edition)
 - o Fire Mechanic terminology changed to Emergency Vehicle Technician
 - The following classes will be retired or moved to the Fire Service Training and Education Program (FSTEP):
 - Allison Transmission
 - Ambulance Service and Maintenance
 - Aerial Apparatus

7.8.5.3: Prerequisites

A. Office of the State Fire Marshal (OSFM) certified Emergency Vehicle Technician I

7.8.5.4: Education

- A. CAL FIRE State Fire Training (SFT)
 - Emergency Vehicle Technician 2A: Electrical Systems B or CFMA: Electrical Systems 2
- B. National Institute for Auto Service Excellence (ASE)
 - 1. Gasoline Engines (T1)
 - 2. <u>Diesel Engines (T2)</u>
 - 3. Drive Train (T3)
 - 4. Brakes (T4)
 - 5. Suspension and Steering (T5)
 - 6. Electrical/Electronic Systems (T6)
 - 7. Heating, Ventilation & A/C (T7)
 - 8. Preventative Maintenance Inspections (T8)
- C. Code of Federal Regulations (CFR)
 - 1. <u>CFR 396.25</u>: <u>Department of Transportation (DOT) Brake Inspector Qualification</u>

7.8.5.5: Certification Exam

- A. Emergency Vehicle Technician II Certification Exam
 - 1. An independent third-party testing agency will administer certification exams.

B. <u>The California Fire Mechanics Academy, Inc. (CFMA) will administer Emergency Vehicle Technician</u> Certification Commission (EVTCC) testing.

7.8.5.6: Certification Task Book

A. Emergency Vehicle Technician II Certification Task Book

7.9.4.7: Experience

A. Fire Service

- 1. Have a minimum of three (3) years full-time, paid experience in a California fire department, public agency, or private industry as an automotive or truck mechanic, with one (1) year of which must be related to the maintenance of emergency response vehicles.
- 2. <u>Have a minimum of four (4) years full-time, paid experience in a California fire department, public agency, or private industry as a truck mechanic with no emergency response vehicles required.</u>
- 3. Have a minimum of five (5) years volunteer time or part-time, paid experience in a California fire department, public agency, or private industry as a truck mechanic with primary duties performing as a truck mechanic.

7.8.5.8: Rank or Position

A. Not applicable

7.8.5.9: Application

- A. <u>See 7.2.4: Application Process With a Certification Task Book.</u>
- B. Supporting Documentation
 - 1. Copies of course completion certificates from SFT for each educational requirement
 - 2. Copies of ASE test completion certificates
 - 3. ASE certificates must be current at the time of application.
 - 4. Copy of current DOT Brake Inspector Qualification
 - 5. Copy of current OSFM Emergency Vehicle Technician I certificate

7.8.5.10: Maintenance

- A. <u>Emergency Vehicle Technician II certification is valid for five years from the date of issuance and expires at the end of the fifth calendar year of valid certification.</u>
 - Example: A certification issued in May 2015 would expire on December 31, 2020.

7.8.5.11: Recertification

- A. <u>Emergency Vehicle Technician II recertification is designed for an individual currently certified as a Fire Mechanic II or whose certification has a maximum of five-year issue date.</u>
- B. <u>The candidate shall successfully complete the following five tests from the National Institute for Auto Service Excellence (ASE):</u>

- 1. Gasoline Engines (T1)
- 2. <u>Diesel Engines (T2)</u>
- 3. Drive Train (T3)
- 4. Brakes (T4)
- 5. Suspension and Steering (T5)
- 6. Electrical/Electronic Systems (T6)
- 7. Heating, Ventilation, and Air Conditioning (T7)
- 8. Preventative Maintenance Inspections (T8)
- C. <u>The candidate shall successfully complete a minimum of 36 hours of CFMA-approved continuing</u> education courses.
- D. See 7.2.4: Application Process With a Certification Task Book.
- E. Supporting documentation:
 - 1. Copies of completion certificates for ASE tests
 - i. ASE certificates must be current at time of application.
 - 2. A copy of a completion certificate for CFMA continuing education
 - 3. A copy of current DOT Brake Inspector Qualification
 - 4. A copy of an OSFM Emergency Vehicle Technician I certificate
- F. SFT shall review applications as they are received.
 - 1. The review committee shall be made up of SFT personnel and authorized representatives of CFMA.
 - 2. See 7.2.3.3: State Fire Training Review.

7.8.6: EMERGENCY VEHICLE TECHNICIAN III

7.8.6.1: Overview

- A. <u>Emergency Vehicle Technician III certification identifies the advanced knowledge and skills necessary to properly manage fleet specifications, records, and personnel in a multiple-technician agency or shop.</u>
- B. <u>Emergency Vehicle Technician III certification replaces Fire Mechanic III/Master Mechanic, scheduled to</u> retire on December 31, 2019.
- C. Candidates pursuing Fire Mechanic III/Master Mechanic certification under that certification's requirements must complete all requirements and submit all application materials and fees postmarked on or before December 31, 2019.
- D. <u>As of April 1, 2018, candidates pursuing Emergency Vehicle Technician III certification should utilize the Emergency Vehicle Technician III curriculum.</u>

7.8.6.2: History

- A. Established
 - September 1, 1984

B. Revised

- January 1, 2001
 - National Institute for Auto Service Excellence (ASE) test on Preventative Maintenance
 Inspections (T8) added
 - o ASE test on Drive Train (T3) deleted
 - o ASE test on Engine Performance (A8) deleted
 - o Experience requirement of heavy equipment mechanic changed to automotive or truck mechanic
 - Recertification requirement added
 - Fire Mechanic I certificates expired within one year are eligible for recertification
- January 1, 2003
 - Experience acquired through private industry qualifies
- January 1, 2010
 - Curriculum updated to align with NFPA 1071: Standard for Emergency Vehicle Technician Professional Qualifications (2011 edition)
- October 1, 2018
 - <u>Curriculum updated using 2012 State Fire Training Curriculum Development Model and to align with NFPA 1071: Standard for Emergency Vehicle Technician Professional</u>
 Qualifications (2016 edition)
 - o Fire Mechanic terminology changed to Emergency Vehicle Technician

7.8.6.3: Prerequisites

A. Office of the State Fire Marshal (OSFM) certified Emergency Vehicle Technician II

7.8.6.4: Education

- A. CAL FIRE State Fire Training (SFT)
 - 1. <u>Emergency Vehicle Technician 3A: Fleet Specifications and Records or CFMA: Specification Spec Writing Class</u>
 - 2. <u>Emergency Vehicle Technician3B: Human Resource Management or Company Officer 2A: HR</u>
 Management or Fire Management I: Management/Supervision
- B. National Institute for Auto Service Excellence (ASE)
 - 1. Gasoline Engines (T1)
 - 2. Diesel Engines (T2)
 - 3. Drive Train (T3)
 - 4. Brakes (T4)
 - 5. Suspension and Steering (T5)
 - 6. Electrical/Electronic Systems (T6)
 - 7. Heating, Ventilation, and Air Conditioning (T7)
 - 8. Preventative Maintenance Inspections (T8)
- C. Code of Federal Regulations (CFR)
 - 1. CFR 396.25: Department of Transportation (DOT) Brake Inspector Qualification

7.8.6.5: Certification Exam

- A. <u>Emergency Vehicle Technician III Certification Exam</u>
 - 1. An independent third-party testing agency will administer certification exams.
- B. <u>The California Fire Mechanics Academy, Inc. (CFMA) will administer Emergency Vehicle Technician Certification Commission (EVTCC) testing.</u>

7.8.6.6: Certification Task Book

A. Emergency Vehicle Technician III Certification Task Book

7.8.6.7: Experience

- A. Fire Service
 - 1. Have a minimum of four (4) years full-time, paid experience in a California fire department, public agency, or private industry as an automotive or truck mechanic, with one (1) year of which must be related to the maintenance of emergency response vehicles.
 - 2. Have a minimum of five (5) years full-time, paid experience in a California fire department, public agency, or private industry as a truck mechanic with no emergency response vehicles required.
 - 3. Have a minimum of six (6) years volunteer time or part-time, paid experience in a California fire department, public agency, or private industry as a truck mechanic with primary duties performing as a truck mechanic.

7.8.6.8: Position

A. Not applicable

7.8.6.9: Application

- A. See **7.2.3**: Application Process With a Certification Task Book.
- B. Supporting Documentation
 - 1. Copies of course completion certificates from SFT for each educational requirement
 - 2. Copies of ASE test completion certificates
 - i. ASE certificates must be current at the time of application.
 - 3. Copy of current DOT Brake Inspector Qualification
 - 4. Copy of current OSFM Emergency Vehicle Technician II certificate

7.8.6.10: Maintenance

- A. <u>Emergency Vehicle Technician III certification is valid for five years from the date of issuance and expires</u> at the end of the fifth calendar year of valid certification.
 - Example: A certification issued in May 2015 would expire on December 31, 2020.

7.8.6.11: Recertification

- A. <u>Emergency Vehicle Technician III recertification is designed for an individual currently certified as a Fire Mechanic III or whose certification has a maximum of five-year issue date.</u>
- B. <u>The candidate must hold the following current National Institute for Auto Service Excellence (ASE)</u> certificates:
 - 1. Gasoline Engines (T1)
 - 2. Diesel Engines (T2)
 - 3. Drive Train (T3)
 - 4. Brakes (T4)
 - 5. Suspension and Steering (T5)
 - 6. Electrical/Electronic Systems (T6)
 - 7. Heating, Ventilation, and Air Conditioning (HVAC) (T7)
 - 8. Preventative Maintenance Inspections (T8)
- C. <u>The candidate shall successfully complete a minimum of 36 hours of CFMA-approved continuing education courses.</u>
- D. See **7.2.4**: Application Process With a Certification Task Book.
- E. <u>Supporting documentation:</u>
 - 1. Copies of completion certificates for ASE tests
 - i. ASE certificates must be current at time of application.
 - 2. A copy of a completion certificate for CFMA continuing education
 - 3. A copy of current DOT Brake Inspector Qualification
 - 4. A copy of an OSFM Emergency Vehicle Technician II certificate
- F. <u>SFT shall review applications as they are received.</u>
 - 1. The review committee shall be made up of SFT personnel and authorized representatives of CFMA.
 - 2. See 7.2.3.3: State Fire Training Review.

Justification:

The State Board of Fire Service approved the new Emergency Vehicle Technician I, II, and III certification tracks and curriculum. Additionally, the State Board of Fire Service approved the implementation plan to retire the Fire Mechanic I, II, and III certification tracks and curriculum on December 31, 2019.

Point of Contact:

Kris Rose, Office (916) 568-2910 e-mail: Kris.Rose@fire.ca.gov